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# NOTICE OF ALLOWANCE AND FEE(S) DUE

63162 7590 12/17/2009

TRASK BRITT, P.C./ MICRON TECHNOLOGY P.O. BOX 2550

SALT LAKE CITY, UT 84110

EXAMINER GHYKA, ALEXANDER G

ART UNIT PAPER NUMBER

2812 DATE MAILED: 12/17/2009

 APPLICATION NO.
 FILINO DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFRMATION NO.

 100665-742
 09/19/2003
 Alan G. Wood
 2269-609 U.S.
 6077

TITLE OF INVENTION: METHODS FOR THINNING SEMICONDUCTOR SUBSTRATES THAT EMPLOY SUPPORT STREET FORMED ON THE SUBTRATES

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/17/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further e indicated unless correcte maintenance fee notificat	form should be used I correspondence including d below or directed off ions.	for transmitting the ISS ing the Patent, advance incrwise in Block 1, by					nould be completed where correspondence address as rate "FEE ADDRESS" for
CURRINT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			No Fer pag	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
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			Г				(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	R	ATTOE	RNEY DOCKET NO.	CONFIRMATION NO.
10/666,742	09/19/2003		Alan G. Wood		2269-6095US 6057		6057
TITLE OF INVENTION THE SUBTRATES	: METHODS FOR TH	INNING SEMICONDU	CTOR SUBSTRATES TH	IAT EMPLOY SUPI	PORT <sup>(</sup>	84REE10RES FOR	MED ON
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	03/17/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS	1			
GHYKA, ALE	XANDER G	2812	438-459000	_			
"Fee Address" indi PTO/SB/47; Rev 03-0. Number is required.  3. ASSIGNEE NAME AT	ND RESIDENCE DATA ess an assignee is ident n in 37 CFR 3.11. Com	" Indication form ted. Use of a Customer A TO BE PRINTED ON	(1) the names of up to cragents OR, alternat (2) the name of a sing registered attorney or 2 registered patent att listed, no name will be THE PATENT (print or ty e data will appear on the DT a substitute for filing ar (B) RESIDENCE: (CTT	ively, the firm (having as a agent) and the name orneys or agents. If r e printed.  (pe) patent. If an assigned assignment.	members of up no name	er a 2er a 2_	ocument has been filed for
Please check the appropri	ate assignee category or	categories (will not be	orinted on the patent):	Individual Co	rporatio	on or other private gro	up entity Government
4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies			th. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  \[ \begin{array}{l} A \text{check is enclosed.} \\ \begin{array}{l} Payment by credit card. Form PTO-2038 is attached.} \\ \begin{array}{l} \text{Director is hereby suthorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).} \end{array}				
	SMALL ENTITY state	as. See 37 CFR 1.27.	☐ b. Applicant is no lo				
interest as shown by the r	Publication Fee (if req ecords of the United Sta	uired) will not be accept ites Patent and Trademar	ed from anyone other than k Office.	the applicant; a regis	stered a	ttorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name			Registration No.				
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	CFR 1.311. The informat U.S.C. 122 and 37 CFF USPTO. Time will var rden, should be sent to t O NOT SEND FEES OR	ion is required to obtain or 1.14. This collection is exy depending upon the indi- he Chief Information Offic COMPLETED FORMS T	retain a benefit by the stimated to take 12 n vidual case. Any cor- cer, U.S. Patent and ' O THIS ADDRESS.	ne publi ninutes mments Fradem . SENE	to which is to file (and to complete, including s on the amount of tit ark Office, U.S. Depa of TO: Commissioner	by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450,

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#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,742	09/19/2003	Alan G. Wood	2269-6095US (03-0593.00/II	6057
63162 75	90 12/17/2009		EXAM	UNER
TRASK BRITT,	P.C./ MICRON TEC	GHYKA, ALEXANDER G		
P.O. BOX 2550		ART UNIT	PAPER NUMBER	
SALT LAKE CIT	Y. UT 84110			

DATE MAILED: 12/17/2009

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)	
10/666,742	WOOD ET AL.	
Examiner	Art Unit	
ALEVANDED C. CHVVA	2012	

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-- This communication is responsive to BPAI decision of 8/19/2009. The allowed claim(s) is/are 17-20 and 23-34. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)  $\square$  All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. 
  ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. 

  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date 3. Information Disclosure Statements (PTO/SB/08), 7. X Examiner's Amendment/Comment Paper No./Mail Date See Continuation Sheet 4. Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Alexander G. Ghyka/ Primary Examiner, Art Unit 2812
- U.S. Patent and Trademark Office

 $Continuation \ of \ Attachment (s) \ 3. \ Information \ Disclosure \ Statements \ (PTO/SB/08), \ Paper \ No./Mail \ Date: 1/13/09; 10/21/08; 8/18/08; 4/21/08.$ 

Art Unit: 2812

## DETAILED ACTION

# EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Cancel Claims 70-98.

BPAI decision of 8/19/2009. See also MPEP 1214.06.

# Allowable Subject Matter

Claims 17-20 and 23-34 are allowed.

The following is an examiner's statement of reasons for allowance: The closest prior art known to the Examiner is listed on the PTO 892 and IDS forms of record. None of the cited references anticipate or make obvious *inter alia* forming a support structure on an active surface of the semiconductor substrate such that the support structure includes an outer peripheral portion that extends beyond an outer peripheral edge of the semiconductor substrate and a downwardly extending portion located laterally adjacent to the outer peripheral edge of the semiconductor substrate; removing material from a

back side of the semiconductor substrate to form a thinned semiconductor substrate", as required by the afore mentioned Claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER G. GHYKA whose telephone number is (571)272-1669. The examiner can normally be reached on Monday through Friday 9 to 5

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber can be reached on (571) 272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/666,742 Page 4

Art Unit: 2812

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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AGG December 10, 2009

/Alexander G. Ghyka/ Primary Examiner, Art Unit 2812